Impact of Hypertext, Intranet and Internet Technologies on Usage of Pathways in Clinical Medicine

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Introduction. The use of pathways in the implementation of clinical algorithms has proven effective. However, both residents and staff physicians often object to the use of pathways for a variety of reasons. In the hope of increasing the usage and effectiveness of pathways it is important to identify the reasons for such reluctance as a first step to the implementation of effective solutions and systems that work.

Methods. In this study the main objections to the use of pathways were identified through a questionnaire and direct one-on-one interaction with both resident and staff physicians. Once a set of objections were identified, a number of these objections were addressed through the deployment of a set of linked hypertext documents readily accessible from multiple sites in a community hospital and from a cluster of affiliated hospitals and clinics. Education as to the usage of and access to these documents was provided largely by library staff as well as clinicians involved in their development. The usage of pathways was then reevaluated.

Results. We report on issues of design, training and impact of such an approach and the role of intranet and internet technologies in its effectiveness.

Conclusion. Many of the expressed and implicit objections in the reasoning of both resident and staff physicians are addressable through the technologies afforded by current software environments and the introduction of an efficient intranet/internet paradigm and its implementation.